

REMARKS

The present application has been reviewed in light of the Office Action dated May 29, 2003. Claims 1-21 and 39-58 are presented for examination, of which Claims 1, 7, 12, 17, 50, and 54 are in independent form. Claims 22-38 were previously canceled, without prejudice or disclaimer of subject matter, in response to a restriction of the original claims. New Claims 39-58 have been added to provide Applicant with a more complete scope of protection, and Claims 1-21 have been amended to improve the form of the claims and not in response to the Examiner's rejections. Favorable reconsideration is requested.

As an initial matter, corrected formal drawings were submitted on March 13, 2003, in response to the Notice of Draftsperson's Patent Drawing Review attached to the Office Action dated December 13, 2002. Applicant respectfully requests the Examiner to provide an indication that the corrected formal drawings have been accepted.¹

Additionally, an Information Disclosure Statement and a corresponding PTO-1449 form were submitted on September 10, 2003 (after the current Office Action was mailed). Applicant respectfully requests the Examiner to return an initialed copy of the PTO-1449 form, indicating that the references listed thereon have been considered and made of record in the present application.

¹ Applicant notes that the current Office Action states that the originally filed drawings are objected to, but does not indicate whether the corrected formal drawings have been accepted (see item 10 of the Office Action Summary).

The Office Action states that Claims 1-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,460,036 (Herz). Applicant respectfully submits that Claims 1-21, as now amended, are patentable over Herz.

Herz relates to a system that electronically identifies a target object based on a target profile of the target object. As understood by Applicant, Herz discloses a way to match users with target objects by generating and storing a target object interest profile for each user, as well as a profile for each target object (see column 6, lines 44-62). Applicant submits that the identification of target objects as disclosed in Herz is not understood to be equivalent to or suggestive of the determination of a task/domain² as recited in amended Claim 1. Instead, Herz's system performs a discovery search for desired objects within a single, fixed domain (e.g., see column 4, lines 5-14, discussing an intention of the Herz system to monitor a user's interests based on the type of articles previously accessed by the user, in which the single, given or known domain pertains to articles).

Like Herz, conventional search routines use a fixed task and/or domain, and is usually a discovery search conducted over a complete universe of indexed web pages, or

² As discussed on pages 18-19 of the specification, tasks may include signifier mapping, robot command translation, and discovery searching. A domain may be a domain of discourse or a semantic domain at any of a range of levels of specificity, such as publications, Web pages, real estate, restaurants, corporate Web sites, and the like (see, for example, the specification at page 8, lines 26-30; and page 18, line 20, *et seq.*). Accordingly, examples of tasks and domains include: signifier mapping within the category of corporations; discovery searching within the category of articles published in specific publications; and robot commands relating to recognition of round objects. Note that the examples provided herein are intended for illustrative purposes only, and the scope of the present invention is not to be limited in any way thereto.

directories thereof, containing the user-inputted command (see pages 2 and 3 of the specification). The user must then sift through unintended or unwanted search results.

For example, a user command of "white fragrant orchid" would likely result in search results over many categories, such as white fragrant orchid species, information on the care and feeding of orchids, retail locations where orchids may be purchased, etc. However, if only white fragrant orchid species was actually relevant, the user would have to wade through all of the search results of non-relevant categories, such as retail locations, information on care and feeding, etc. Or, if "white fragrant orchid" signified a particular, desired Web resource (like the website of a particular corporation), a signifier mapping search returning its URL (or taking the user to the website) would be a more efficient task to do this than the fixed discovery search.

Clearly, there is a need for a flexible search apparatus which determines a task or domain associated with the currently inputted user command. For example, a determination may be based on the user's expression, or inferred from the user's current and/or past behavior (see pages 16-17 of the specification). An apparatus making such a determination desirably provides the user with more relevant and efficient results. Accordingly, the apparatus of amended Claim 1 requires a "means for determining a current task/domain with which a current user command inputted by a user is associate."

As discussed above, Herz simply does not teach or suggest any means for determining a current task and/or domain associated with an currently inputted user command. For at least this reason, Applicant submits that amended Claim 1 is patentable over Herz.

Another aspect of the present invention, as set forth in amended Claim 1, is the “means for determining a current response to the current user command based on a portion of stored cumulative feedback data gathered from the multiple users that is associated with the current task/domain.” Applicant’s apparatus stores such cumulative feedback data during previous operations of the apparatus, and segregates the data in accordance with a certain task and/or domain. As discussed above, the apparatus determines a current task/domain (for example, a signifier mapping within the category of corporations) associated with the current user command (“IBM”). Based on a portion of the stored cumulative feedback data associated with the determined task/domain (for example, for this task, users have primarily wanted the URL of the website of a corporation’s service division), the apparatus determines a current response to the current user command (e.g., the URL of the website of IBM’s service division).³ Accordingly, using task/domain-specific feedback in determining the response, beyond the determination of task/domain itself, makes the response even more relevant and efficient.

Herz’s system includes a filtering feature for searching through many target objects to identify those that are of greatest interest to a user (see column 17, line 30, *et seq.*). The filtering feature utilizes a relevance feedback technique to refine its knowledge of the user’s interest of target objects that the user has had an opportunity to evaluate. The feedback can be either active, in which the user explicitly provides the feedback of his interest, or passive, in which the user’s interest in the target object is gauged indirectly. For target objects that the user

³ Subsequently, the current response is communicated to the user, and current feedback data from the user regarding the current response is received by the apparatus and added to the portion of the stored cumulative feedback data associated with the current task/domain.

has not yet seen, the filtering system must estimate the user's interest (see column 18, line 28, *et seq.*). Herz also discloses an estimation process in Fig. 12. The estimation process is understood to use the intrinsic quality of the target object, based in part on the target object's popularity among users in general, and the topical interest that similar users have in the same or similar targets (see step 1205 of Fig. 12, and the corresponding description at column 19, line 18, *et seq.*).

Herz, however, does not teach or disclose or suggest using task/domain-specific feedback to determine a response to the inputted user command, as required by amended Claim 1. Even assuming that Herz suggests using feedback data from other users to determine a response⁴, that data is used without any consideration of the current task/domain associated with the current user command, and also without consideration of tasks/domains of previous searches. Therefore, Applicant respectfully submits that amended Claim 1 is patentable over Herz for this additional reason.

In view of the above, Applicants submit that Claim 1 is not anticipated by Herz and respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(e). Independent Claims 7, 12, and 17 include a feature similar to that discussed above, in which a determination is made as to task/domain of an inputted user command and, based on feedback data associated with the determined task/domain and gathered from multiple users, providing a response to the

⁴ It is, however, unclear whether Herz's system uses feedback data to determine a response, and thus Applicant does not concede this point. Applicant's above assumption is for discussion purposes only.

user command. Therefore, those claims also are believed to be patentable for at least the same reasons.

New independent Claims 50 and 54 are directed to a method/system of utilizing feedback, in which a database is provided, which stores a plurality of previous commands in association with a plurality of task/domains respectively corresponding to the plurality of previous commands. The plurality of previous commands have been determined to respectively correspond to the plurality of task/domains based on feedback obtained when each previous command was processed. When a command is inputted, a task/domain corresponding to the inputted command is determined based on the plurality of previous commands and the plurality of task/domains stored in the database. The database is updated by storing therein feedback on the inputted command and the task/domain determined for the inputted command.

Applicant submits that new independent Claims 50 and 54 are patentable over Herz for at least the reason that Herz is not seen to show or suggest the feature of storing a plurality of previous commands in association with a plurality of task/domains respectively corresponding to the plurality of previous commands, nor is Herz understood to show or suggest the features of determining a task/domain corresponding to an inputted command based on the plurality of previous commands and the plurality of task/domains stored in the database, and updating the database by storing therein feedback on the inputted command and the task/domain determined for the inputted command.

The other claims in the present application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable for at least the

same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual consideration or reconsideration, as the case may be, of the patentability of each claim on its own merits is respectfully requested.

The present Amendment After Final Action is believed clearly to place this application in condition for allowance. Therefore, its entry is believed proper under 37 C.F.R. § 1.116 and is respectfully requested, as an earnest effort to advance prosecution and reduce the number of issues in this application. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

STATEMENT OF SUBSTANCE OF INTERVIEW

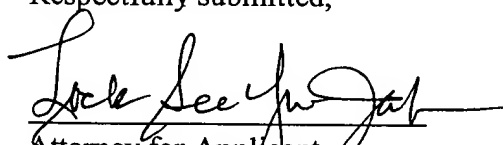
In the telephone interview between the Examiner and Applicant's representatives on November 19, 2003, Applicant's representatives pointed out that the search for target objects performed by the Herz system is not equivalent to or suggestive of the determination of a task and/or domain, as claimed in the present application. Herz does not teach any other task/domain besides a discovery search. Therefore, Herz does not teach to one of ordinary skill in the relevant art determining a different type of task.

The Interview Summary states that "the representatives submitted that Herz does not teach user command associated with task/domain." It is respectfully submitted that the above quote does not accurately characterize the substance of the interview, because Applicant's representatives stressed that Herz does not disclose or suggest determining a task/domain associated with an inputted user command, and determining a response to the user command based on feedback data associated with the determined task/domain gathered from multiple users.

CONCLUSION

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,


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